

Treatment Decisions for Localized Prostate Cancer

Asking Men What's Important

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OBJECTIVE: To identify what factors men consider important when choosing treatment for prostate cancer, and to assess why men reject watchful waiting as a treatment option.

PARTICIPANTS: One hundred two consecutive men with newly diagnosed localized prostate cancer identified from hospital and community-based urology practice groups.

MEASUREMENTS: Patients were asked open-ended questions about likes and dislikes of all treatments considered, how they chose their treatment, and reasons for rejecting watchful waiting. The interviews were conducted in person, after the men had made a treatment decision but before they received the treatment.

MAIN RESULTS: The most common reasons for liking a treatment were removal of tumor for radical prostatectomy (RP) ($n = 15$), evidence for external beam radiation (EBRT) ($n = 6$), and short duration of therapy for brachytherapy (seeds) ($n = 25$). The most frequently cited dislikes were high risk of incontinence for RP ($n = 46$), long duration of therapy for EBRT ($n = 29$), and lack of evidence for seeds ($n = 16$). Only 12 men chose watchful waiting. Fear of future consequences, cited by 64% ($n = 90$) of men, was the most common reason to reject watchful waiting.

CONCLUSION: In discussing treatment options for localized prostate cancer, clinicians, including primary care providers, should recognize that patients' decisions are often based on specific beliefs regarding each therapy's intrinsic characteristics, supporting evidence, or pattern of complications. Even if patients do not recall a physician recommendation against watchful waiting, this option may not be chosen because of fear of future consequences.

KEY WORDS: localized prostate cancer; treatment; decision making.

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Prostate cancer is the most commonly diagnosed neoplasm and the second leading cause of cancer deaths in men,¹ but the clinical spectrum of disease can vary greatly. For example, prostate cancer can be fatal within 1 to 2 years after diagnosis, yet 30% to 40% of men at age 50 are believed to have histologic evidence of prostate cancer.² In addition, a man's lifetime risk of developing clinical prostate cancer is 9.5%, but less than one third of men diagnosed ultimately die as a result of the cancer.³

In this context, current treatment options for prostate cancer include radical prostatectomy, external beam radiation, brachytherapy ("seed implantation"), cryotherapy, and hormones. Radical prostatectomy is considered the gold standard therapy by many physicians,⁴⁻⁶ but both surgery and radiation are associated with significant complications, side effects, and failure rates.⁷⁻¹⁰ For example, one study found that 28% of patients required additional therapy (radiation or hormones) within 4 years postprostatectomy.¹⁰

Despite many therapeutic options, no definite evidence exists that any modality reduces mortality from prostate cancer.¹¹⁻¹⁴ The clinical guidelines panel from the American Urological Association¹⁵ and a study using decision analysis¹² concluded that active surveillance without treatment, known as watchful waiting, is a viable option for many patients diagnosed with early, localized prostate cancer. The substantial uncertainty confronting men regarding treatment decisions for localized prostate cancer has also been reported in the news media.¹⁶ Because the "best" options for treatment have not been established, patient preferences should be an important consideration when physicians provide advice and recommendations.

A better understanding of how men arrive at this treatment decision would help physicians and future patients make more informed treatment decisions for localized prostate cancer. Despite the fact that primary care practitioners do not directly provide prostate cancer therapy, primary care physicians most often perform the screening tests, the digital rectal exam and prostate specific antigen blood test, and are often involved with the patient in making decisions about cancer therapy.¹⁷ Furthermore, primary care physicians appear to have different views of the efficacy of the various treatment modalities compared with urologists.¹⁸ Therefore, primary care physicians need a better understanding of the factors affecting the decision making process to help their own patients make informed and comfortable decisions.

The objectives of this qualitative study were to identify the likes and dislikes of men with newly diagnosed localized prostate cancer about the treatments they considered, assess how they chose their specific treatment, and elicit men's reasons for rejecting watchful waiting as a therapeutic option.

METHODS

One hundred twenty-eight consecutive men with newly diagnosed localized prostate cancer were identified through the pathology departments of Yale-New Haven Hospital and West Haven Veterans Affairs (VA) Medical Center between 15 June, 1997 and 30 March, 1998. The cohort represented patients drawn from a university, a VA, and two community urology practices. Localized prostate cancer was confirmed through chart review and was defined as no evidence of regional spread or distant metastases. One hundred two men (80%) were included in the study. Twenty-one men were excluded: 11 men had already received treatment at the time of invitation for the study, 5 men did not live in the United States, and 5 men had a language barrier. Only 5 (4%) men refused to participate.

The principal investigator conducted in-person interviews using a semistructured questionnaire with eligible patients. The interviews were done either in the clinic or at the patient's home after each patient had made a treatment decision but before actual receipt of the chosen treatment. The key components of the interview included demographic characteristics (age, race, education, marital status, occupation, social support, and religion); the types of treatments patients discussed with their physicians; the likes and dislikes of each treatment; the specific treatment selected; how they had chosen their specific therapy; and if applicable, why the patient rejected watchful waiting. Men who did not choose watchful waiting were asked on a 5-point Likert scale ("not likely" to "extremely likely") what they thought their chances of dying would be if they had chosen watchful waiting. Men were also asked what physicians and nonphysician information sources (e.g., pamphlets, books, journals, etc.) they consulted for advice about therapy. Questions about treatment and watchful waiting were open-ended¹⁹ to allow patients to provide responses using their own reactions and words. Patient comorbidity was determined by chart review using the Charlson comorbidity score.²⁰ Pretreatment evaluation (e.g., bone scan or other imaging) and stage of the tumor were also determined by chart review.

Using a clinimetric approach,¹⁹ patients' open-ended responses were classified independently into categories and items based on similar content of similar responses by the two authors. Differences were then resolved by consensus to produce three final classification schemes (taxonomies) describing the likes and dislikes of each treatment considered, how treatment was chosen, and the reasons why men rejected watchful waiting. We present the frequencies of responses for categories and items in the three taxonomies.

RESULTS

Table 1 shows the demographic characteristics for the 102 men. The mean age was 66.4 years; the majority of men were married, white, and had a college degree or higher. Most men were otherwise healthy; 71% had a

Charlson comorbidity score of 0. The majority of tumors were stage T1c and had Gleason scores between 4 and 6.

The study sample was drawn from the practices of 4 urologists at an academic center, 5 from the VA medical center, 6 from private practice, and 1 radiation oncologist who submitted pathology specimens for review. The median number of urologists men consulted for advice was 2 (range, 1 to 6) per man, with a minimum of 75 different urologists seen by the cohort of patients prior to their visit with 1 of the physicians noted above. Thirty-nine men saw a radiation oncologist. This cohort also used a median of 2 nonphysician sources for information about therapy (range, 0 to 6). Only 5 patients did not consult any nonphysician source. Seventy-one percent used informational pamphlets, and 53% read a book on prostate cancer. Forty percent of men consulted the Internet, and 18% obtained and read medical journal articles on therapy for prostate cancer.

Treatments Discussed and Selected

Table 2 lists the primary treatments considered and selected by the cohort of men. Eighty percent or more discussed radical prostatectomy, brachytherapy, or external beam radiation with a physician; only 59% discussed the watchful waiting approach. The most popular therapy was brachytherapy, with 51% choosing this treatment approach. In Connecticut, brachytherapy was only available at the university site during the study period. Surgery or external beam radiation was chosen by 20% and 15%, respectively. Three percent of men chose hormones as a primary approach, and none chose cryotherapy. Only 12% of men opted for watchful waiting. For patients not choosing watchful waiting, their median rating for likelihood of dying from prostate cancer was only moderately likely, with only 14% of men believing they would be extremely likely to die. A modest correlation was demonstrated between patients' final choice of therapy and the primary physician

Table 1. Baseline Characteristics of Cohort (N = 102)

Characteristic	
Mean age, y	66.4
White, %	89
Married, %	85
Education completed, %	
High school or less	32
College degree	39
Advanced degree	29
Charlson comorbidity score, %	
0	71
≥1	29
Tumor stage, %	
T1c or lower	74
>T1c	26
Gleason score, %	
2 to 3	3
4 to 6	64
7 to 10	33

Table 2. Primary Treatments Discussed and Selected (N = 102)

Treatment	Discussed n (%)	Selected n (%)
Radical prostatectomy	94 (92)	20 (20)
Brachytherapy	95 (93)	52 (51)
External beam radiation	82 (80)	15 (15)
Watching waiting	60 (59)	12 (12)
Hormonal	29 (28)	3 (3)
Cryotherapy	19 (19)	0 (0)

they consulted in New Haven ($r^2 = .03$, $P = .06$); no correlation was demonstrated with the total number of urologists seen ($r^2 = .003$, $P = .56$).

When asked about comments from their physicians, 42% of men recalled receiving at least 1 recommendation for surgery, 25% of men for brachytherapy, 18% of men for external beam radiation, and 8% of men for watchful waiting. Twenty-seven percent of men could not recall a recommendation for a specific therapy from any physician. Seventy-one percent of men who received at least 1 recommendation for surgery chose another therapy. When asked directly, only 36% of men stated that a urologist influenced their treatment decision.

Classification for Likes and Dislikes of Treatments Discussed

The classification scheme (taxonomy) describing men's likes and dislikes of treatment for localized prostate cancer (Table 3) consists of four main axes: external information, intrinsic characteristics of treatment, personal impressions, and economic concerns. Specific examples for each category from all four axes are provided in Appendix 1.

External information consists of three categories. The first, evidence or "track record" of a particular treatment denotes the patient's perception of the strength or weakness of the evidence regarding treatment efficacy for cure or prevention of tumor spread. For example, one patient stated that surgery "had the best track record, was the best (treatment) for longevity." The second category includes any recommendations from physicians, but also from family, friends, or other patients. The third category is the likelihood of side effects such as incontinence and impotence.

Intrinsic characteristics of treatment is the second main axis of responses, and includes seven categories: removal (tumor vs prostate gland); target of the treatment (focused or diffuse); duration of treatment (brief vs long); promptness of treatment effect (rapid vs slow); anatomic extent of procedure (limited vs extensive/invasive); length of recovery (short vs long); and the possibility of future treatment options (open vs precluded). An example from this axis for the duration of treatment category is "(I like) seeds because you're in and out quickly."

The third axis, personal impressions, includes the categories general preferences, global patient concerns,

Table 3. Taxonomy of Likes and Dislikes for Treatment of Localized Prostate Cancer

Axis I: external information
Categories
Evidence or "track record" of treatment for cure, prevention of tumor spread
Recommendations: physician, family, other sources
Likelihood of side effects: incontinence, impotence, other
Axis II: intrinsic characteristics of the treatment
Categories
Removal: tumor vs prostate
Target of treatment: focused vs diffuse
Duration of treatment: brief vs long
Promptness of treatment effect: rapid vs slow
Anatomic extent of procedure: limited vs extensive/invasive
Length of recovery: short vs long
Possibility of future treatment options: open vs precluded
Axis III: personal impressions
Categories
General preferences
Global patient concerns
Previous treatment experiences: patient or others
Axis IV: economic concerns
Categories
Insurance: covered vs noncovered treatment
Loss of income
Travel expense

and previous treatment experiences. "I don't want to undergo the knife again" is an example from the latter category. Axis 4, economic concerns, completes the taxonomy, with the categories insurance coverage and loss of income. An example is "I can't afford to be out of work."

As shown in Table 4, the most commonly reported likes and dislikes come from the categories external information and intrinsic characteristics of treatment. For radical prostatectomy, removal of the tumor and the strength of the evidence were the two main likes, but were reported by less than 20% of those men considering surgery. In fact, these men reported no other likes in any other category for surgery. The most frequently reported dislikes concerned the risks for incontinence (49%), impotence (38%), and the invasiveness of the procedure (31%). Other important dislikes included long recovery time (17%), negative previous treatment experiences (23%), and global patient concerns (15%).

For external beam radiation (EBRT), likes were the evidence/track record of therapy and the noninvasiveness of the procedure, but were stated by only 7% and 5% of the men, respectively. Dislikes of EBRT were much more prevalent: 35% disliked the long duration of the treatment, and 27% were concerned about the lack of precision in targeting the radiation. Ten patients (12%) disliked EBRT because they believed this treatment precluded the possibility of other treatment options in the future.

The most common likes of brachytherapy were a "reverse image" of surgery and EBRT. More than 20% of men

Table 4. Reasons for Most Common Likes and Dislikes of Treatment

Treatment	Likes, n (%)	Dislikes, n (%)
Radical prostatectomy (N = 94)	Removal of tumor, 15 (16) Strong evidence, 13 (14)	Incontinence, 46 (49) Impotence, 36 (38) Invasive, 29 (31)
External beam radiation (N = 82)	Strong evidence, 6 (7) Noninvasive, 4 (5)	Long duration of treatment, 29 (35) Diffuse targeting of treatment, 22 (27)
Brachytherapy (N = 95)	Short duration of treatment, 25 (26) Noninvasive, 24 (25) Focused targeting of treatment, 22 (23)	Weak evidence, 16 (17)

highlighted the short duration of treatment, the limited invasiveness, and focused targeting of brachytherapy as specific likes. The only major dislike was the weakness of evidence supporting this approach, noted by 17% of the men.

How Men Chose Their Treatment

Table 5 provides the most common reasons, based on the taxonomy described above, for how men chose their specific treatment (the total exceeds 100% because men often provided more than one reason). The most common reasons for individual choice came from the external information category, with 77% of men citing at least one factor from this category. Although 30% of men explicitly mentioned a physician recommendation, 26% also emphasized the evidence or track record of a treatment.

Thirty-nine men (39%) stated items from the axis intrinsic characteristics of treatment, with 15 (15%) citing the noninvasive nature of their treatment as a major reason. Another 14 men (13%) specifically choose their treatment as an “antichoice” to surgery. Finally, 14 (13%) men stated they made their decision by “weighing the risks and benefits” of each treatment.

Why Men Reject Watchful Waiting as “Treatment”

The taxonomy for the reasons why men rejected watchful waiting and the number of men citing each reason is

Table 5. Taxonomy of Reasons for How Patients Choose Their Treatment (N = 102)

Category	Number of Men Citing (%)
I. External information	78 (77)
Physician recommendation	31 (30)
Evidence/track record	27 (26)
Likelihood of side effects	12 (13)
Other	8 (8)
II. Intrinsic characteristics of treatment	40 (39)
III. Patient-centered factors	12 (12)
IV. Economic concerns	5 (5)

shown in Table 6. Appendix 2 provides examples of responses for each category listed below. Axis I, involving a general fear of consequences, contains three categories. The first category, need to “combat” the tumor, was cited by 64% of the men. For the other two categories, 14% of men cited relative “youth” and 13% cited fear of tumor spread.

Axis II, involving a specific perception of elevated risk, contains three categories: elevated prostate-specific antigen (PSA) or Gleason score; family history of cancer; and coexistent condition. In axis II, elevated PSA or Gleason score was the most common reason to reject watchful waiting, cited by 11 (12%) men.

Finally, axis III, external persuasion, contains two categories labeled physician recommendation and family advice. Eleven (12%) men cited a physician recommendation against watchful waiting. Finally, family members influenced the decision of 4 (4%) men against the watchful waiting approach.

DISCUSSION

Men diagnosed with localized prostate cancer currently face a number of treatment options without strong

Table 6. Taxonomy of Reasons for Rejecting Watchful Waiting (N = 90)

Categories	Number of Men Citing (%)
Axis I: general fear of consequences	
Need to “combat” the tumor	58 (64)
Relative “youth” (age)	13 (14)
Fear of tumor spread	12 (13)
Axis II: specific perception of elevated risk	
Elevated PSA or Gleason score	11 (12)
Family history of cancer	1 (1)
Coexistent condition	2 (2)
Axis III: external persuasion against watchful waiting	
Physician recommendation	11 (12)
Family advice	4 (4)

evidence to support the superiority of one treatment modality over another. Given this considerable uncertainty, primary care physicians, urologists, and other specialists should understand what factors are important in men's decision making in order to counsel patients effectively about their therapeutic options. This study provides insight into such factors, specifically the likes and dislikes that influence the choice of therapy for localized prostate cancer.

Although radical prostatectomy is considered the primary approach to therapy for many men, the majority of this cohort did not choose surgery. Even fewer men chose the other "accepted" alternative, EBRT. For both of these treatments, men reported a much greater number of negative attributes, or dislikes, compared with positive attributes, or likes. Therefore, it is not surprising that the total number of men who received surgery or EBRT ($n = 35$) was still substantially less than those who chose brachytherapy ($n = 52$).

The finding that the risk for incontinence and impotence ranked high among the dislikes of surgery was not unexpected. A substantial proportion of patients simply expressed a dislike for the invasiveness of surgery, and a number of men also cited either their own or other's previous negative surgical experience. For EBRT, important dislikes included concern over "diffuse" targeting, the length of time and inconvenience involved, and the notion that future treatment options would be precluded.

The likes and dislikes of brachytherapy provide an interesting and important contrast to surgery and EBRT. Favorable attributes of brachytherapy included short duration of therapy, anatomically limited/less invasive, and treatment targeted to the prostate. These three frequently cited attributes help to explain why brachytherapy was the most commonly chosen treatment among this group, despite the belief among physicians that brachytherapy is still experimental.^{4,6,21} Time was another major factor in patients' treatment decisions; this strongly suggests that many patients sought to minimize the amount of disruption in their daily lives.

When asked how they chose a treatment, men's reasons closely paralleled those of the likes and dislikes of treatments discussed with physicians. Interestingly, 70% did not cite a physician recommendation as a main factor in their choice of a treatment, despite 74% of the cohort receiving a recommendation for a specific treatment from at least one physician. Most men cited items such as evidence/track record of a treatment, likelihood of side effects, and intrinsic characteristics of treatments such as invasiveness, duration of treatment, length of recovery, and removal of the cancer. Only a small proportion (13%) used a "risk-benefit analysis" weighing multiple factors to choose their treatment.

Although it is possible that items cited by patients could have been influenced by information obtained from physicians, the crucial point is that patients ultimately had to make a decision based on their perceptions and assessments of each treatment. Since the primary care

physician may best understand the patient's beliefs, value systems, and motives, the primary care physician may be in the best position to help the patient if they understand the factors important in the therapeutic decision. This arrangement is not necessarily unique to prostate cancer; primary care providers often need to help patients navigate through difficult decisions about a range of medical problems such as cardiac invasive procedures, palliative care, chemotherapy, and other elective surgeries.

Overall, the 90 patients receiving "active" therapy decided, explicitly or implicitly, to reject watchful waiting. The most frequent reason not to choose watchful waiting was the patient's need to "do something" or combat their prostate cancer ($n = 58$, 64%); only 11 (12%) men cited a physician recommendation as a reason to reject watchful waiting. It is not surprising that many men would be uncomfortable living with the uncertain risk and potential dread of carrying a potential killer.²² Fear of death or metastatic spread, as well as the uncertainty regarding cancer progression and our ability to monitor progression, are plausible explanations for the low number of men choosing watchful waiting. Support for this explanation also comes from a decision analysis that found 31 healthy men assigned a lower baseline utility to watchful waiting compared with radical prostatectomy without cancer recurrence, perhaps representing a level of psychological distress living with cancer.²³ Our data also support this possibility of general distress; the majority of men choosing active therapy did not believe they were much more likely to die from prostate cancer had they chosen watchful waiting. Fleming et al. did not consider the fear of future consequences in their decision analysis tree.¹⁰

In addition, the taxonomy highlights the important influence of family: 4 men specifically noted that the desire of family members for treatment was a major reason not to choose watchful waiting. More work is needed to better understand the influence of family members, and whether the family members themselves reject watchful waiting because of the fear of future consequences.

Because only 12 men chose watchful waiting, it is difficult to determine what factors lead to the decision to choose watchful waiting. We also do not know if these patients continued with watchful waiting or embarked on therapy at a later date, but 7 of the 12 men cited a physician recommendation as a reason choosing watchful waiting. Therefore, a physician recommendation for watchful waiting may help certain patients consider watchful waiting more strongly.

This study has several limitations. The results must be interpreted in the context of the current state of knowledge about prostate cancer treatments. Changes in the state of knowledge about treatments will likely affect patients' decision-making process in the future. Because of the lack of definitive data supporting surgery or radiotherapy, the role of watchful waiting remains controversial. Although many investigators support watchful waiting as a "reasonable option" for older and less healthy men who have lower

grade tumors, we still do not understand all of the factors that put even these men at higher risk for progression of disease.²⁴⁻²⁷ Many men in this study with a life expectancy less than 10 years still chose surgery or radiotherapy.

Second, although patients were enrolled consecutively and few men declined to participate, few minority patients are represented, the educational and socioeconomic level of this cohort is high, and the patients came from a limited geographic area. This may limit the generalizability of our results, and the taxonomy should be validated in a different patient population. The number of participants also does not allow for investigation of associations between other demographic factors and patient preferences.

The practice patterns for our population may not be representative of other regions of the country; a large proportion of men chose brachytherapy, not considered a standard approach to therapy. However, the majority of recommendations were for treatments other than brachytherapy. In fact, the most common recommendation was for surgery, and nearly 25% of the cohort did not recall receiving any specific recommendations from their physicians.

Although only 37% of men stated that a urologist was influential in their decision, we cannot determine the true influence of the physicians because they were not interviewed and the counseling sessions about various therapies were not recorded. It may be true that physicians had a greater influence than the patients believed. Although we cannot be certain of what was said between patients and physicians, the results of this study strongly suggest that factors other than physician advice are affecting men's decisions about treatment.

This study also has important strengths. First, men were interviewed at a key point in their decision-making process, after a treatment choice had been made but before they had actually received the treatment. This approach prevented the potential bias that outcomes of treatment could have had on the recall of important factors in their pretreatment decision making. In addition, the clinimetric approach allowed men to identify, in their own words, the factors that are important when making this difficult decision about treatment for localized prostate cancer. The corresponding classification of responses will not only be useful for future research but can help guide physicians today when counseling newly diagnosed patients about their treatment options. Physicians can have better insight into what patients view as the important characteristics of each treatment option. Finally, our work helps to better define the reasons why men so often reject watchful waiting.

CONCLUSION

Most men, based on their perceptions, chose treatment for localized prostate cancer based on a limited number of factors: external recommendations, intrinsic characteristics of the treatment, their own impressions, and economic considerations. In helping patients decide on

treatment options for localized prostate cancer, primary care physicians should be prepared to discuss the specific features, supportive evidence, and complications of each therapy, as well as patient-centered factors affecting each individual patient's decision. Few men select watchful waiting, but patients seldom recall a physician recommendation against this option as a reason for their choice. Because of their central role in screening coupled with the uncertainty about what is the optimal therapy for prostate cancer, primary care physicians need to understand men's perceptions about prostate cancer in order to help men navigate the difficult decisions regarding choice of therapy.

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APPENDIX 1

Examples of Patient Likes and Dislikes of Treatment

Axis I: External information

Categories

- A. Evidence or “track record”: for surgery, “has studies to 15 years with good survival.”
- B. Recommendations: for surgery, “Urologist said this is out because of my age, diabetes, and vascular situation.”
- C. Likelihood of side effects: for surgery, “(I dislike) the high level of incontinence and impotence.”

Axis II: Intrinsic characteristics of treatment

Categories

- A. Removal: for surgery, “cancer is gone!, removed.”
- B. Target of treatment: for brachytherapy, “doesn’t destroy surrounding tissue, seeds like a smart bomb”; for EBRT, “can’t target prostate easily. Radiation just blasts away with the rectum and urinary tract in the way.”
- C. Duration of treatment: for EBRT, “radiation takes 7 weeks, I don’t need this bull—, 7 weeks is too long.”
- D. Promptness of treatment effect: for brachytherapy, “seeds work early on.”
- E. Anatomic extent of procedure: for surgery, “I didn’t like the idea of being mutilated”; “I don’t like that surgery is so radical.”
- F. Length of recovery: for surgery, “dislike the 4 to 5 weeks of recuperation.”
- G. Possibility of future treatment options: for EBRT, “didn’t like the idea that I wouldn’t have any other options if radiation failed.”

Axis III: Patient-centered factors

Categories

- A. General preferences: for surgery, “I don’t like having major surgery”; “dislike just the idea of it.”
- B. Global patient concerns: for surgery, “surgery is a gamble”; for EBRT, “scared of radiation overall.”
- C. Previous treatment experience: for surgery, “I didn’t want another surgery. I haven’t fully recovered from my kidney surgery”; “I’ve been cut up so much I should be a comedian”; for EBRT, “wife burned very badly when treated for breast cancer.”

Axis IV: Economic concerns

Categories

- A. Insurance: for cryotherapy, “not covered by insurance, this did play into decision.”
- B. Loss of income: for surgery, “I didn’t want to stop working because I’m still trying to get out of bankruptcy— if something happens and I can’t work, I’ll go under.”
- C. Travel expense: for EBRT, “dislike the 6 weeks of driving to the Bronx.”

APPENDIX 2

Reasons Why Men Reject Watchful Waiting

Axis I: General fear of consequences

Categories

- A. Need to combat the tumor: "I never considered (watchful waiting). I wanted to get rid of the cancer, cancer a very serious thing"; "If you know you have cancer, you can't not do something about it."
- B. Relative youth: "My relative age of 64 was the key factor— I'm too young."
- C. Fear of tumor spread: "too risky, cancer could become invasive and spread to other parts of body."

Axis II: Specific perception of elevated risk

Categories

- A. Elevated PSA or Gleason score: "watching waiting not an option with a Gleason score of 6"; "(because of) the fact my PSA was doubling rapidly I felt I had to do something."
- B. Family history of cancer: "My father had prostate cancer. I don't want to die from prostate cancer."
- C. Coexistent condition: "My medications make it easier for my tumor to grow."

Axis III: External persuasion

Categories

- A. Physician recommendation: "After talking with the doctor, he made it clear to take care of (the cancer) now."
 - B. Family advice: "I wouldn't mind (watchful waiting), but forced by my daughter because (I'm) too young. Daughter felt (that because) of my age, I should do something"; "My wife won't go for this. I have a problem, so we should get a solution. My wife makes (the) major decisions."
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